Helpful Tools

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Sampling for Airborne Contaminant Concentrations (Links)

Use with the Abrasive Blasting Rule, Chapter 296-818 WAC

Use the following links for information on sampling airborne contaminant concentrations in the breathing zone:

- Personal Sampling for Air Contaminants:
  - http://www.osha.gov/dts/osta/otm/otm_ii/otm_ii_1.html#1
- Index of Sampling and Analytical Methods
  - http://www.osha.gov/dts/sltc/methods/toc.html
  - http://www.osha.gov/SLTC/samplinganalysis/index.html
- Sampling and Analytical Methods
  - http://www.osha.gov/dts/sltc/methods/index.html
  - http://www.osha.gov/SLTC/samplinganalysis/index.html

Types of Abrasives used for Blasting Operations

Use with the Abrasive Blasting Rule, Chapter 296-818 WAC

This helpful tool outlines the types and examples of abrasives used for blasting operations.

Types of Abrasive	Examples of Abrasives	Other Information
Synthetic or natural mineral grains	– Crystalline Silica – Garnet	Silica sand is the most hazardous. Limit the use of silica sand wherever possible. **Link:** For types of abrasive used in place of silica go to the Occupational Safety and Health Administration's (OSHA), homepage at: http://www.osha.gov/. Select 'S' for Silica.
Slag abrasive	– Copper slag – Nickel slag – Mixed metal slag	May contain heavy metals.
Metallic shot or grit	– Steel – Chilled cast iron	The potential hazard is considered minimal.
Organic	– Ground corncobs – Ground walnut shells	Readily combustible organic abrasives can form explosive mixtures with air.

Types of Coatings Removed in Blasting Operations

Use with the Abrasive Blasting Rule, Chapter 296-818 WAC

This helpful tool outlines the types and examples of coatings removed during blasting operations.

Types of Coatings	Examples of Coatings	Other Information
Surface - Formed during the fabrication of a part **Protective** - Applied after fabrication	Those containing toxic metals: - Paints containing mercury - Cadmium plating - Lead: ▪ Paints on structural steel ▪ Deposits on pistons of internal combustible engines Plastic or resin: - May decompose and produce irritating by-products during blasting operations	The type of coating should be known to evaluate potential hazards.

Blast Cleaning Enclosures and Recommended Inward Air Velocities

Use with the Abrasive Blasting Rule, Chapter 296-818 WAC

This helpful tool provides examples of blast cleaning enclosures and the recommended air velocities used for abrasive blasting operations.

Examples of Blast Cleaning Enclosures	Recommended Air Velocities in Feet Per Minute (fpm)
Abrasive blasting cabinets	At least 500 fpm at the hand openings
Blast cleaning rooms	At least 300 fpm with well baffled air inlets
Rotary blast cleaning tables	200-250 fpm at the access opening
Abrasive separators Bucket elevators Other accessory abrasive handling equipment, including blast cleaning drums and barrels	200-250 fpm at all openings